



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,381	09/26/2003	Yong Cheol Park	0465-1055P	2746
2292 7590 01/02/2008 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			EXAMINER CHOW, LIXI	
			ART UNIT 2627	PAPER NUMBER
			NOTIFICATION DATE 01/02/2008	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

<b>Office Action Summary</b>	Application No. 10/670,381	Applicant(s) PARK ET AL.	
	Examiner Lixi Chow	Art Unit 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 28 November 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 25-28, 31, 32, 34, 36-38 and 41-51 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 25-28, 31, 32, 34, 36-38 and 41-51 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some    \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/28/07 has been entered.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 25, 36, 37 41, 42, 44 and 45 are rejected under 35 U.S.C. 102(e) as being anticipated by Shin (US 6,529,458).

Regarding claim 25:

Shin discloses a method for managing a defective area of a recording medium having a data area, a lead-in area and a lead-out area (see Fig. 1), the method comprising:

detecting a defective unit during reproducing or recording operation (see col. 2, lines 29-56);

recording the data of the defective unit in a replacement unit (see col. 2, lines 44-47); and

recording defect management information in a defect management area (see col. 2, lines 47-48),

wherein the defect management area includes a first part and a second part, the first part is used to record therein defect management information generated during a recording operation and the second part is used to record therein defect management information generated during a reproducing operation (since Shin discloses that defect management can be performed during either write operation or read operation, then the SDL inherently includes a first part and a second part) and

wherein the defect management information generated during the recording operation includes position information of a defective unit and a corresponding replacement unit, and the defect management information generated during the reproducing operation includes position information of a defective unit and a corresponding replacement unit (see Fig. 2B and col. 2, lines 10-14; the SDL inherently includes position information of the defective block and a corresponding replacement unit).

Regarding claim 36:

Claim 36 recites similar limitations as in claim 25; therefore, claim 36 is rejected under the same reasons set forth in claim 25.

Regarding claim 37:

Shin discloses the recording medium as claimed in claim 36, wherein the second part of the defect management area is assigned in the lead-in area, and the first part and the second part of the defect management area are assigned separately (see Fig. 1 and col. 1, lines 43-46 and lines 56-58; because defect management area is used during both recording operation and

reproducing operation, it is inherent that the first part and the second part of the defect management area are assigned separately).

Regarding claims 41 and 42:

Claims 41 and 42 recite similar limitations as in claims 25 and 37; therefore, claims 41 and 42 are rejected under the same reasons set forth in claims 25 and 37.

Regarding claims 44 and 45:

Claims 44 and 45 recite similar limitations as in claims 25 and 37; therefore, claims 44 and 45 are rejected under the same reasons set forth in claims 25 and 37.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 26-28, 31, 32 34, 38, 43 and 46-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shin (US 6,529,458) in view of Takahashi (US 7,002,882).

Regarding claim 26:

Shin fails to disclose recording an access pointer in the defect management area; however Takahashi discloses a method for managing a defect area of a recording medium, comprising:

recording an access pointer in a defect management area, the access pointer indicating position of the defect management information (see col. 2, lines 18-27).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the method of Shin to record the access pointer in the defect

management area as taught by Takahashi. One of ordinary skill in the art would have been motivated to do this because defect management area can be reliably detected and accurate recording/reproducing of the data can be achieved.

Regarding claim 27:

Shin discloses the method, wherein the first and the second parts of the defect management area are assigned in the lead-in area respectively (see col. 1, lines 43-46 and lines 56-58).

Regarding claim 28:

Shin discloses the method, wherein the replacement unit is included in a spare area, and the spare area is assigned in the data area (see Fig. 1).

Regarding claims 31, 32 and 34:

The combination of Shin and Takahashi discloses all the limitations in claims 31, 32 and 34 (see claims 25-28). Accordingly, claims 31, 32 and 34 are rejected under the same reasons provided in the claims 25-28 above.

Regarding claim 38:

Shin does not, but Takahashi discloses the recording medium, wherein the second part of the defect management area is assigned in the data area, and the second part of the defect management area includes at least one sub defect management area (see col. 6, lines 58-62).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to assign the second part of the defect management area in the data area. One of ordinary skill in the art would have been motivated to do this because the reliability of the data

stored in the DMA can be maintained with out multiple write of the DMA (see col. 6, lines 62-64).

Regarding claim 43:

Shin discloses that both first part and second part of the defect management area are recorded in the lead-in area; however, Takahashi discloses that a part of the DMA is recorded in the spare area (see col. 6, lines 61-62).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to assign the second part of the defect management area in the spare area. One of ordinary skill in the art would have been motivated to do this because the reliability of the data stored in the DMA can be maintained with out multiple write of the DMA (see col. 6, lines 62-64).

Regarding claims 46:

Claim 46 is rejected under the same reasons set forth in claim 43, because they recite similar subject matter.

Regarding claims 47-51:

Shin does not, but Takahashi discloses a method/recording medium, wherein the whole DMA is assigned in the data area (see Fig. 16).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to assign the first part and the second part of the defect management area in the data area. One of ordinary skill in the art would have been motivated to do this because the reliability of the data stored in the DMA can be maintained (see col. 10, lines 55-58).

***Response to Arguments***

6. Applicant's arguments with respect to claims 25-28, 31, 32, 34, 36-38 and 41-51 have been considered but are moot in view of the new ground(s) of rejection.

*Conclusion*

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Park et al. (US 6,414,923) is cited because Park et al. discloses a method for management defect unit during write/read operation.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lixi Chow whose telephone number is 571-272-7571. The examiner can normally be reached on Mon-Fri, 8:30am to 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on 571-272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LC 12/21/07

  
THANG Y. TRAN  
PRIMARY EXAMINER